Stendal & Lavale Spec.
Feb. 23, 1885

(1 SHEET)

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Inv 35

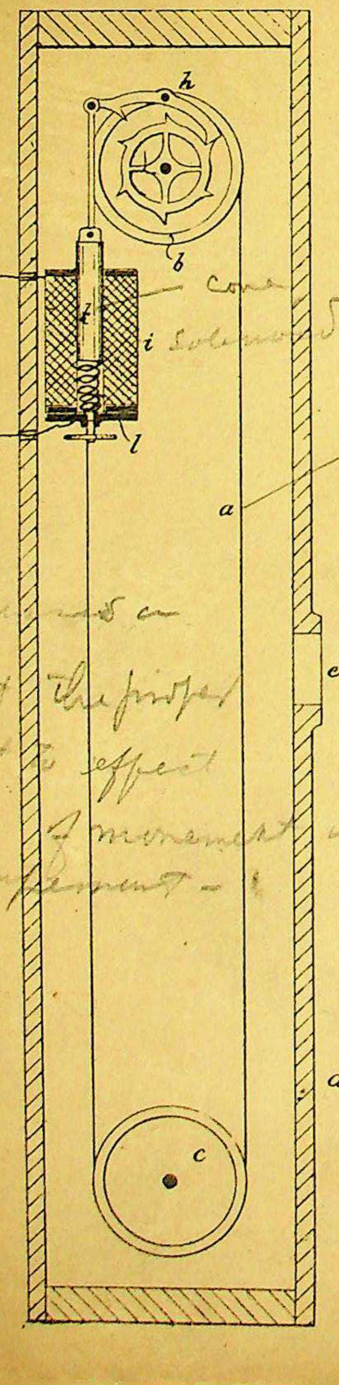
177
Ind Sta.

177
Ind
Indicators
Station

40
370

1885

FIG. 2.



cone
i solenoid
paper band

produces a
action at the proper
moment to effect
change of movement in
the escapement – 1

FIG. 1.

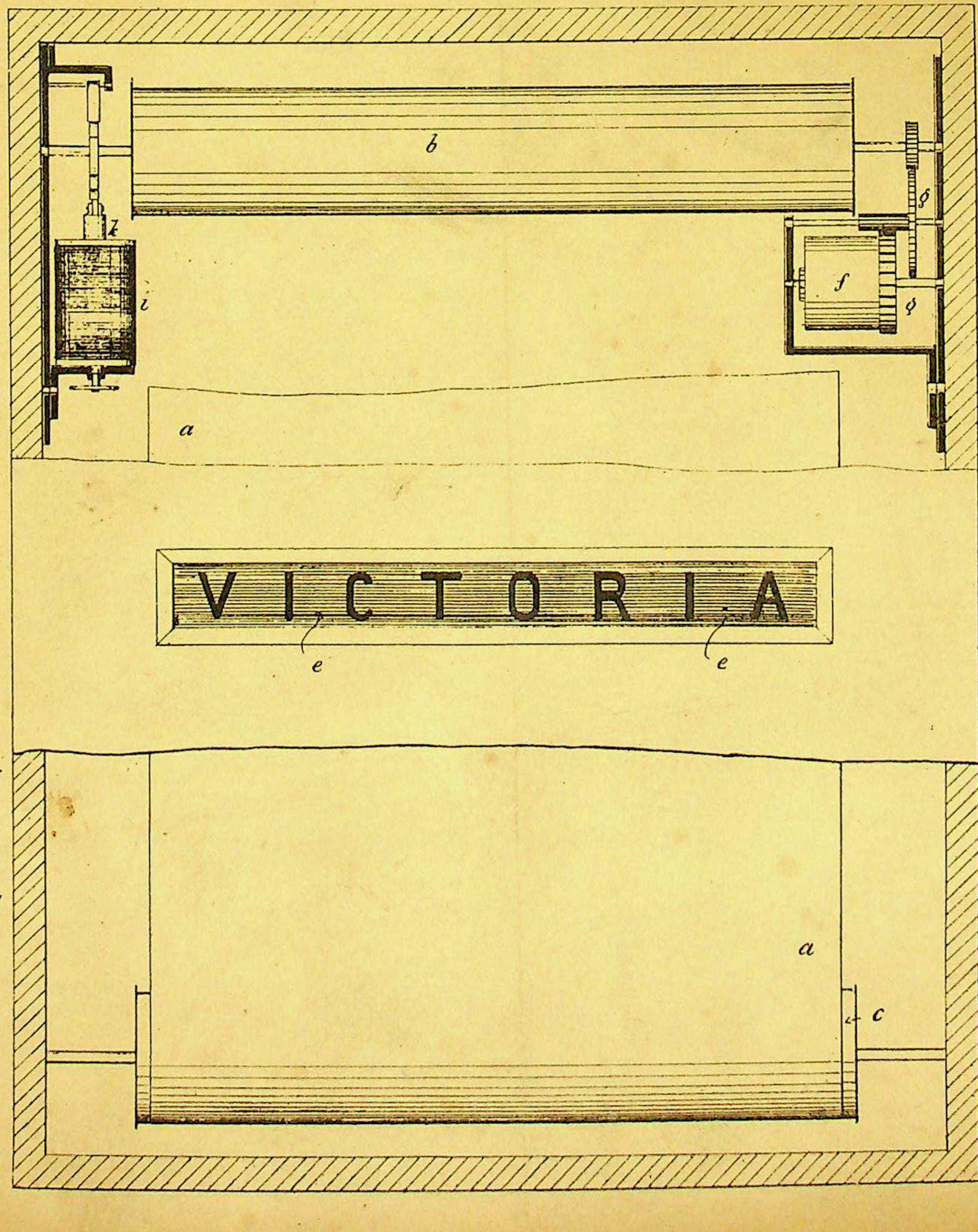
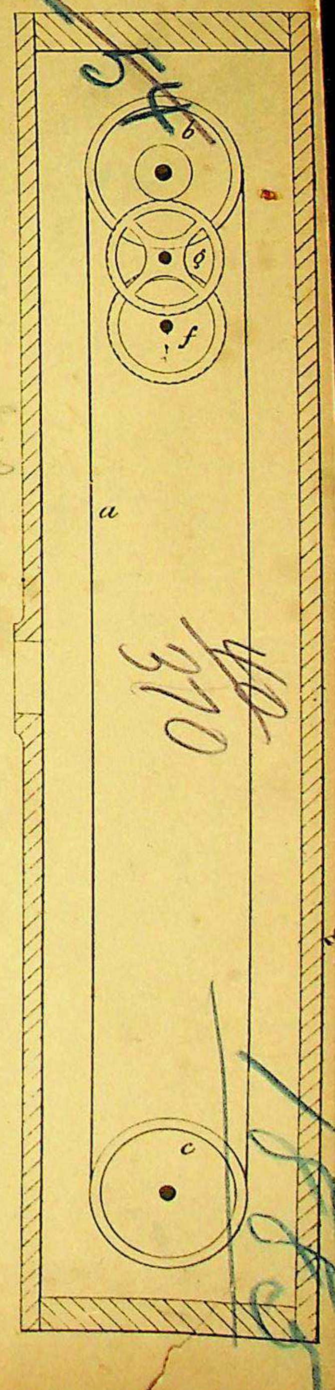


FIG. 3.



16 Signals
Station Indicators

A.D. 1885, *23rd February.* N° 2450.

Apparatus for Indicating Names of Next Stations in Railway Carriages.

PROVISIONAL SPECIFICATION.

We JAMES KENDAL of 106 Cheapside in the City of London Watch and Clock Manufacturer and MARC LAVAL 110 Cannon Street in the City of London Commission Agent do hereby declare the nature of an invention for AN APPARATUS FOR INDICATING NAMES OF NEXT STATIONS IN RAILWAY CARRIAGES to be as follows:—

The apparatus has for its object the indication in Railway Carriages and other public conveyances of the name of each Station or stopping place in rotation as it is approached and consists of an endless band of paper or other suitable material passing over two rollers and revolving with them and on which are printed in proper order the names of the different stations.

The power required to drive the band is supplied by a spring barrel to be wound up say once a day connected by gear to one of the rollers to give the necessary number of movements the changing of the names is effected by an escapement controlled by a solenail connected to a battery in the guards van and thrown into action by the guard pressing a button at the proper moment.

It is of course intended that there should be a separate indication in each carriage of a train all of them being connected and the whole under the control of the guard.

Dated this 23rd day of February 1885.

A. LESLIE ANTILL,
1, Gresham Buildings, Basinghall Street, E.C.

[*Price 6d.*]

Apparatus for Indicating Names of Next Stations in Railway Carriages.

COMPLETE SPECIFICATION.

We James Kendal of 106 Cheapside in the City of London Watch and Clock Manufacturer and Marc Laval of 110 Cannon Street in the City of London Commission Agent do hereby declare the nature of an invention for AN APPARATUS FOR INDICATING NAMES OF NEXT STATIONS IN RAILWAY CARRIAGES and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This invention relates to the indication in railway carriages of the name of each station or stopping place in rotation as it is approached and consists in the employment for that purpose of a travelling or rotary Indicator bearing the names of the successive stations in a route, which indicator is operated by a spring barrel or spring power device controlled by electricity, all substantially as hereinafter described. And in order that the said Invention may be perfectly understood we shall now proceed more particularly to describe the same and for that purpose shall refer to the several figures on the accompanying sheet of drawings the same letters of reference indicating corresponding parts in all the figures.

Figure 1. of the accompanying drawings represents a sectional elevation of an apparatus constructed according to this Invention and Figures 2 and 3 are transverse vertical sections of the same taken at opposite ends of the apparatus A is an endless band of paper or other suitable material passing over two rollers B, C the axes of which are mounted so as to be capable of turning in bearings in or carried by the inclosing case D. This band bears the names of all the stations or stopping places in the route arranged in proper order so that by importing intermittent motion to the band the several names are in succession brought opposite and displayed through the opening E.

The motion of the band is obtained by means of a spring barrel F which is wound up periodically, say for example once a day, and imparts rotary motion to the upper roller B through the intervention of a train of wheels G and thence to the band passing over such roller and over the roller C. The roller B, with the band is maintained stationary during the requisite intervals by means of a detent or escapement H controlled by a solenoid I which latter is so arranged that its core K is nominally held by means of a spring L (the tension of which may be adjusted) in the position shewn in the drawings thus causing the detent or escapement H to lock the roller B but that when the electric circuit 1—2 containing the solenoid is completed with the battery the core K is moved in opposition to the spring L and the detent or escapement H is released the spring barrel being thus allowed to feed the band onwards.

The battery may conveniently be placed in the guard's van whence the wires 1—2 from the solenoids of the several indicators (one of which is to be placed in each carriage of the train) are conducted the circuit being completed by the guard or other attendant pressing a button or making a contact at the proper moment and the whole of the indicators being thus operated simultaneously.

Where the stations are arranged otherwise than on a complete circle it will be necessary in order to avoid reversing the motion of the roller B for the return journey to provide the band with two sets of names arranged in the proper order so that by the motion of the band in one and the same direction the correct names may be displayed when travelling either to or fro or if preferred the direction of motion of the roller B may be reversed at the return journey in any one of the well known ways.

Although we have described the Invention as carried out with the use of a travelling band it is obvious that the roller B may be made of sufficient diameter to itself bear on its periphery the names of the stations and the band and lower roller be thus dispensed with. It will further be evident that an ordinary electro-magnet and armature may be substituted for the solenoid also that numerals letters or other conventional characters may be employed in lieu of the names by which the stations are commonly known all such modifications coming within the scope of the invention.

Having now particularly described and ascertained the nature of the said invention and in what manner the same is to be performed we declare that what we claim is

A travelling or rotary indicator, bearing the names of the successive stations in a route operated by a spring barrel or spring power device controlled by electricity substantially and as for the purpose hereinbefore described.

Dated this nineteenth day of June 1885.

A. LESLIE ANTILL,
1, Gresham Buildings, Basinghall Street, E.C.,
Solicitor,
Agent for the said James Kendal and Marc Laval.

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1885.